AMENDMENTS TO THE CLAIMS

1-14. **(Canceled)**

15. **(Currently amended)** The method of Claim 71~~A method of reducing the processing of a protein antigen by a MHC Class II molecule by a cell, the method comprising contacting the cell with an inhibitor of asparaginyl endopeptidase,~~ wherein

the inhibitor of asparaginyl endopeptidase is a competitive inhibitor comprising a peptide selected from the group consisting of Ala-Glu-Asn-Lys-NH (AENK) (SEQ ID NO: 1) and Lys-Asn-Asn-Glu-NH (KNNE) (SEQ ID NO: 2); or

the inhibitor of asparaginyl endopeptidase is a non-competitive inhibitor of asparaginyl endopeptidase which comprises an asparagine residue to which is attached a group capable of reacting with active site cysteine of asparaginyl endopeptidase and forming a covalent complex therewith.

16. **(Original)** A method according to Claim 15 wherein the inhibitor is a competitive inhibitor.

17. (**Canceled**)

18. **(Previously presented)** A method according to Claim 16 wherein the peptide is N and C-terminal blocked.

19. **(Previously presented)** A method according to Claim 15 wherein the inhibitor is a non-competitive inhibitor.

20. **(Previously presented)** A method according to Claim 19 wherein the inhibitor has the structure B1-$(X)_n$-Asn-Q where B1 is any suitable N terminal blocking group; X is an amino acid residue; n is between 1 and 100, Asn is an asparagine residue and Q is a group capable of reacting with the active site cysteine of asparaginyl endopeptidase and forming a covalent complex therewith.

21-37. **(Canceled)**

38. **(Previously presented)** A pharmaceutical composition comprising a competitive inhibitor of asparaginyl endopeptidase and a pharmaceutically acceptable carrier,

wherein the competitive inhibitor of asparaginyl endopeptidase comprises an N and C-terminal blocked peptide selected from the group consisting of Ala-Glu-Asn-Lys-NH (AENK) (SEQ ID NO: 1) and Lys-Asn-Asn-Glu-NH (KNNE) (SEQ ID NO: 2).

39. **(Canceled)**

40. **(Canceled)**

41. **(Original)** A pharmaceutical composition according to Claim 38 further comprising an immunosuppressive agent.

42. **(Previously presented)** A pharmaceutical composition comprising the composition of Claim 52 and a pharmaceutically acceptable carrier.

43-51. **(Cancelled)**

52. **(Previously presented)** An inhibitor of asparaginyl endopeptidase which has the structure Bl-(X_aX_n)Asn-Q wherein B1 is any suitable N terminal blocking group; X_aX_n are the n amino acid residues immediately N terminal to an Asn cleavage site in the invariant chain of Class II MHC molecules; Asn is an asparagine residue; and Q is a group capable of reacting with the active site of asparaginyl endopeptidase and forming a covalent complex therewith.

53. **(Previously presented)** An inhibitor according to Claim 52 wherein the number of amino acid residues in (X_aX_n) is between 1 and 25.

54. **(Original)** An inhibitor according to Claim 53 which is any of Bl-Ser-Gln-Asn-Q; Bl-Leu-Glu-Asn-Q; Bl-Leu-Gln-Asn-Q; B1-Pro-Glu-Asn-Q; Bl-Leu-Lys-Asn-Q; Bl-Gln-Asn-Q; B1-Glu-Asn-Q; B1-Asp-Glu-Asn-Q; Bl-Asn-Gly-Asn-Q; B1-Phe-Pro-Asn-Q; B1-Val-Pro-Asn-Q; and Bl-His-His-Asn-Q.

55. **(Canceled)**

56. **(Previously presented)** A composition comprising an inhibitor of asparaginyl endopeptidase and an inhibitor of cathepsin S, wherein

the inhibitor of asparaginyl endopeptidase is a competitive inhibitor comprising peptide selected from the group consisting of Ala-Glu-Asn-Lys-NH (AENK) (SEQ ID NO: 1) and Lys-Asn-Asn-Glu-NH (KNNE) (SEQ ID NO: 2); or

the inhibitor of asparaginyl endopeptidase is a non-competitive inhibitor of asparaginyl endopeptidase which comprises an asparagine residue to which is attached a group capable of reacting with active site cysteine of asparaginyl endopeptidase and forming a covalent complex therewith.

57-59. (Canceled)

60. **(Currently amended)** A method according to Claim 15 wherein the antigen presenting cell is~~, or is comprised~~ in a tissue or organ[[,]] for transplantation into a patient.

61. **(Previously presented)** An inhibitor according to Claim 53 wherein the number of amino acid residues in (X_aX_n) is between 2 and 10.

62-68. **(Canceled)**

69. **(Previously presented)** A pharmaceutical composition comprising a non-competitive inhibitor of asparaginyl endopeptidase which comprises an asparagine residue to which is attached a group capable of reacting with active site cysteine of asparaginyl endopeptidase and forming a covalent complex therewith, and a pharmaceutically acceptable carrier.

70. **(Canceled)**

71. **(New)** A method of suppressing or inhibiting the processing of an antigen by an antigen presenting cell, the method comprising contacting the cell with an inhibitor of asparaginyl endopeptidase.

72. **(New)** The method of claim 71, wherein the inhibitor of asparaginyl endopeptidase has the structure Bl-(X_aX_n)Asn-Q wherein B1 is any suitable N terminal blocking group; X_aX_n are the n amino acid residues immediately N terminal to an Asn cleavage site in the invariant chain of Class II MHC molecules; Asn is an asparagine residue; and Q is a group capable of reacting with the active site of asparaginyl endopeptidase and forming a covalent complex therewith.

73. **(New)** The method of claim 15, wherein the inhibitor of asparaginyl endopeptidase is said competitive inhibitor.

74. **(New)** The method of claim 71, wherein the method further comprises contacting the cell with an inhibitor of cathepsin S.